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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,487	07/02/2003	Takashi Honda	14225.6US01	3509

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EXAMINER

ROSENBERG, LAURA B

ART UNIT	PAPER NUMBER
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3616

DATE MAILED: 02/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/612,487

Applicant(s)

HONDA, TAKASHI

Examiner

Laura B Rosenberg

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. ____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>12/2/03</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. The preliminary amendment filed on 02 July 2003, in which claim 5 was amended, has been entered.

Specification

2. The abstract of the disclosure is objected to because " occupant' " should be changed to -- occupant's -- (line 9). Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 5, and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over McPherson (5,630,616) in view of Acker et al. (6,349,964). McPherson discloses:
 - Side air bag device (#22)
 - Plurality of air bags (#50) accommodated in a folded state in a side of a seat (within frame members #12, 14)
 - Inflator (within inflator housing #28)
 - First air bag deployed to side of a waist and deployed from a seat cushion (including seat cushion frame #12)

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- Second air bag deployed to a side of a breast and deployed from a seat back (including seat back frame #14)
- Plurality of airbags are expanded by gas supplied from corresponding inflators (one inflator attached to frame #12, one inflator attached to frame #14)

McPherson does not specifically disclose internal pressures in the air bags being different from one another.

Acker et al. teach:

- Side air bag device (including #18)
- Airbag (#18) with a plurality of chambers (#20, 22) accommodated in a folded state in a side of a seat (attached to backrest #14 of seat #12)
- Inflator (#16)
- Internal pressures in the plurality of chambers of the airbag are different from one another (columns 3-4)

It would have been obvious to one skilled in the art at the time that the invention was made to modify the side air bag device of McPherson such that it comprised internal pressures in the air bags being different from one another as claimed in view of the teachings of Acker et al. so as to protect the thorax region of a vehicle occupant with an air bag chamber of lower pressure since it is more sensitive compared with the pelvis region, which is protected with an air bag chamber of higher pressure (Acker et al.: column 3).

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5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over McPherson (5,630,616) in view of Acker et al. (6,349,964) as applied to claim 1 above, and further in view of Yamanishi et al. (5,544,913). McPherson does not disclose a single inflator diverting gas with a branching pipe to supply gas to the plurality of air bags. Yamanishi et al. teach:

- Side air bag device (including #16, 18)
- Plurality of air bags (#16, 18) accommodated in a folded state next to a seat
- Inflator (#28) that diverts gas into the air bags via a branching pipe (#30)

It would have been obvious to one skilled in the art at the time that the invention was made to modify the side air bag device of McPherson such that it comprised a single inflator that diverts gas to the plurality of air bags via a branching pipe as claimed in view of the teachings of Yamanashi et al. so as to decrease the number of inflators to be used with the side air bag device (Yamanashi et al.: column 3), thus decreasing the cost associated with the air bag module.

6. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over McPherson (5,630,616) in view of Acker et al. (6,349,964) as applied to claim 1 above, further in view of Yamanishi et al. (5,544,913), and further in view of White, Jr. et al. (5,848,804). McPherson discloses:

- First air bag (#50 attached to #12) deployed to a side of a waist of an occupant
- Second air bag (#50 attached to #14) deployed to a side of a breast of an occupant

McPherson does not disclose the use of a one-way valve.

White, Jr. et al. teach:

- Side air bag device (#10)
- Airbag (#30) with a plurality of chambers (#174a, 174b) accommodated in a folded state in a side of a seat (attached to frame #12 of seat #14)
- Inflator (#32)
- Internal pressures in the plurality of chambers of the airbag are different from one another (column 6)
- One-way valve (#230) inhibiting a back flow of gas from one chamber into another chamber (column 6)

It would have been obvious to one skilled in the art at the time that the invention was made to modify the side air bag device of McPherson such that it comprised a one-way valve as claimed in view of the teachings of White, Jr. et al. so as to maintain one air bag in an inflated condition for a substantial period of time without losing inflation fluid to the other air bag (White, Jr. et al.: column 6).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Hattori et al., Rink et al., and Ono et al. each disclose a plurality of air bags, a single inflator, and valve mechanisms.

Kirchoff and Steffens, Jr. et al. each disclose a plurality of air bags, a single inflator, and pressure control.

Semchena et al. disclose a plurality of inflators and a single air bag.

Sinnhuber et al., Coman et al., and Tsutsumi each disclose a plurality of air bags and a plurality of inflators.

Hill and Brown each disclose a single air bag with a plurality of chambers and a single inflator.

Acker et al. ('485) disclose a plurality of air bags and a single inflator.

Mueller discloses a single air bag and a single inflator in a similar configuration to that show in the applicant's drawings.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura B Rosenberg whose telephone number is (703) 305-3135. The examiner can normally be reached on Monday-Friday 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Dickson can be reached on (703) 308-2089. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Laura B. Rosenberg

Laura B Rosenberg
Patent Examiner
Art Unit 3616

LBR

Paul N. Dickson 2/17/05

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